



391084



**POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 1 - SITE INFORMATION AND ASSESSMENT**

**I. IDENTIFICATION**

01 STATE 02 SITE NUMBER

I 40 025 587 304

**II. SITE NAME AND LOCATION**

01 SITE NAME (Legal, common, or descriptive name of site)

Prudential Oil Co.

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER

SECT 2/3 T-1-S, R-13-W

03 CITY

Mt Carmel Township

04 STATE

IL

05 ZIP CODE

62439

06 COUNTY

Wabash

07 COUNTY CODE

185

08 CONG DIST

19

09 COORDINATES LATITUDE

38 27.32

LONGITUDE

087 50 15

Mount Carmel 7.5' Quad (238)

10 DIRECTIONS TO SITE (Starting from nearest public road)

See Attached Map

**III. RESPONSIBLE PARTIES**

01 OWNER (if known)

Unknown

02 STREET (Business, mailing, residential)

03 CITY

04 STATE

05 ZIP CODE

06 TELEPHONE NUMBER

( )

07 OPERATOR (if known and different from owner)

Prudential Oil Company

08 STREET (Business, mailing, residential)

500 N. 15th STREET

09 CITY

Lawrenceville

10 STATE

IL

11 ZIP CODE

62439

12 TELEPHONE NUMBER

( ) UNK

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL:

(Agency name)

☐ C. STATE☐ D. COUNTY☐ E. MUNICIPAL☐ F. OTHER:

(Specify)

☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: / /

MONTH DAY YEAR

☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c)

DATE RECEIVED: / /

MONTH DAY YEAR

☒ C. NONE**IV. CHARACTERIZATION OF POTENTIAL HAZARD**

01 ON SITE INSPECTION

☐ YES

DATE

/ /

☒ NO

MONTH DAY YEAR

BY (Check all that apply)

☐ A. EPA☐ B. EPA CONTRACTOR☐ C. STATE☐ D. OTHER CONTRACTOR☐ E. LOCAL HEALTH OFFICIAL☐ F. OTHER:

(Specify)

CONTRACTOR NAME(S):

02 SITE STATUS (Check one)

☐ A. ACTIVE☐ B. INACTIVE☒ C. UNKNOWN

03 YEARS OF OPERATION

BEGINNING YEAR

ENDING YEAR

1 Unk

☒ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Oily Waste (Toxic)

Heavy Metals (Soluble/Toxic/Persistent)

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Ground Water (Population/Environment)

**V. PRIORITY ASSESSMENT**

01 PRIORITY FOR INSPECTION (Check one, if high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH

(inspection required promptly)

☒ B. MEDIUM

(inspection required)

☐ C. LOW

(inspect on time available basis)

☐ D. NONE

(No further action needed, complete current disposition form)

**VI. INFORMATION AVAILABLE FROM**

01 CONTACT

02 OF (Agency/Organization)

03 TELEPHONE NUMBER

( )

04 PERSON RESPONSIBLE FOR ASSESSMENT

Richard Lange

05 AGENCY

IEPA

06 ORGANIZATION

HSCS

07 TELEPHONE NUMBER

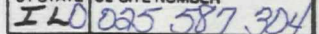
(217) 782-6760

08 DATE

09.03.85

MONTH DAY YEAR





I HIGHLY VOLATILE  
J EXPLOSIVE  
K REACTIVE  
L INCOMPATIBLE  
M NOT APPLICABLE

## EPA FORM 2070-12 (7-81)





POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

ILD 025 587 304

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

The near sterilization of soils (>5 acres), Attributed to increased soil salinity, has been noted at other similar sites.

(See F Above) (See 05 other following)

01 ☐ K. DAMAGE TO FAUNA

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION (Include name(s) of species)

01 ☐ L. CONTAMINATION OF FOOD CHAIN

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

(Spills runoff standing liquids leaking drums)

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

01 ☐ N. DAMAGE TO OFFSITE PROPERTY

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

Site was infrequently inspected by regulatory agencies, Facility has now been backfilled making illegal dumping hard to detect.

☒ Q. DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

Denuding of soils by brines is deemed leading cause of soil erosion in several Il. counties.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 661

IV. COMMENTS

Prudential Oil Co  
500 N. 15th St.  
Lawrenceville, IL 62439

Information as appears  
on ERRIS (L-4)

V. SOURCES OF INFORMATION (Cite specific references, e. g., state files, sample analysis, reports)

S.I.A. study





POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

IL 025 587 304

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 661.2

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

Highly soluble brine waste placed for disposal in unlined lagoon. This practice has impacted private wells at similar facilities.

01 ☐ B. SURFACE WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ C. CONTAMINATION OF AIR

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ E. DIRECT CONTACT

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☒ F. CONTAMINATION OF SOIL

03 AREA POTENTIALLY AFFECTED: Unk (Acres)

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

Loss of production (Ag land) + damage to soil structure has been noted at similar sites.

(See J following) (See 05 Other following)

01 ☒ G. DRINKING WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 661.2

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

See A above

01 ☐ H. WORKER EXPOSURE/INJURY

03 WORKERS POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ I. POPULATION EXPOSURE/INJURY

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

## EXECUTIVE SUMMARY

This site has been placed in the ERRIS data base as a result of its selection for Phase II evaluation during the federally funded Surface Impoundment Assessment (SIA) study of 1980. During ERRIS placement the operator name and business address were utilized from the SIA which results in deviations from ERRIS for actual site location, Part I section II items 02 through 08 of form 2070-12. This use of operator name and address has also led to one (1) ERRIS listing representing, in actuality, from one (1) to one hundred eight (108) actual brine pits at an equal number of separate locations.

Some considerable effort has been expended to select the site with highest, Phase II SIA, pollution potential where multiple sites are represented by a single ERRIS listing. One must keep in mind that the Phase II SIA represents no more than 7 percent of the brine pits identified in Illinois. Phase I identified more than 3200 pits where Phase II evaluated a random selection of less than 220. One must also maintain a realization that phase II pollution potential was determined by bench top study with little or no actual site visitation or monitoring.

Minimal to no file information exists on this site beyond that contained in Phases I and II of the SIA. There is no direct evidence of hazardous waste disposal at this site beyond the potentially hazardous constituents of Illinois Basin brines, but with only annual inspections by Illinois Mines and Minerals staff relevant to oil production practices and recent backfilling of most brine pits in Illinois, disposal of off site material of unknown nature is possible. A literature review and laboratory analysis of samples from two other sites indicate concern for contamination of groundwater/surface water by Sodium, Sulfate, Chloride etc. (Non-Hazardous Constituents), concern for heavy metals (i.e., Chrome, Vanadium, Barium) and long chain hydrocarbons.

A question arises as to the addressability of the heavy metals by CERCLA when one considers 40 CFR section 300.6 "Definitions - Federally Permitted Release (i)" and Section 101(10) of CERCLA. The statement "and which are reinjected" seems to allow CERCLA action, but interpretation and clarification by USEPA legal staff seems required. The long chain hydrocarbons would appear to be included in the exclusion given to crude oil and fractions thereof under 40 CFR section 300.6 "Definitions-Hazardous Substance" and 101(14) of CERCLA.

A medium priority has been assigned due to the potential impact of this site on groundwater in a rural area where private wells are generally the sole source for potable water. Similar sites have impacted private wells to a point requiring users to seek alternative sources for drinking water. A site inspection should be scheduled to verify/update owner-operator information and gain more thorough site specific information.

RML:bf/22





56.5





